

CL29Z7H/CL29Z6H CL32Z7H/CL32Z6H CL34Z7H/CL34Z6H

# **COLOR TELEVISION**



# Owner's Instructions

# Warning! Important Safety Instructions



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

*Note to CATV system installer:* This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

Attention: pour eviter les chocs electriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

*Important:* One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws. Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

As an ENERGY STAR Partner,

Samsung Electronics America, Inc. has determined that this product or product model meets the ENERGY STAR guidelines for energy efficiency.

# Thank You for Choosing Samsung

Thank you for choosing Samsung! Your new Samsung TV represents the latest in television technology. We designed it with easy-to-use on-screen menus and closed captioning capabilities, making it one of the best products in its class. We are proud to offer you a product that will provide convenient, dependable service and enjoyment for years to come.

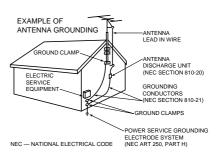
# Important Safety Information

- Always be careful when using your TV receiver. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.
  - Read all safety and operating instructions before operating your TV.
  - Keep the safety and operating instructions for future reference.
  - Heed all warnings on the TV receiver and in the operating instructions.
  - Follow all operating and use instructions.
  - Unplug the TV receiver from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
  - Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
  - Do not use the TV receiver where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
  - Do not place the TV on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling TV can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the TV. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the TV and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.



- Provide ventilation for the TV receiver. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the TV receiver on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the TV receiver on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your TV receiver only from the type of power source indicated on the marking label.
   If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.

- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.
- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the TV.
- Ground outdoor antennas. If an outside antenna or cable system is connected to the TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



- Do not attempt to service the TV yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - when the power-supply cord or plug is damaged
  - if liquid has been spilled on the unit or if objects have fallen into the unit
  - if the TV has been exposed to rain or water
  - if the TV does not operate normally by following the operating instructions
  - if the TV has been dropped or the cabinet has been damaged
  - when the TV exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the TV to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.

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# **Chapter One**

YOUR NEW TV

#### **List of Features**

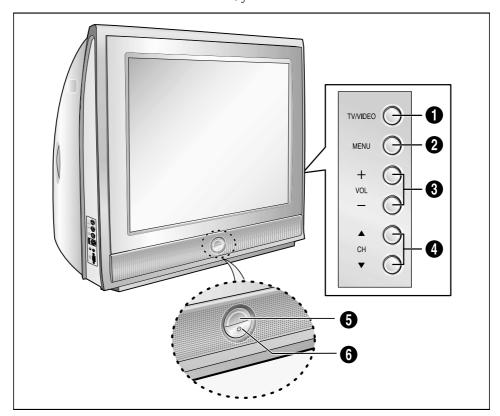
Your TV was designed with the latest technology. This TV is a high-performance unit that includes the following special features:

- · Full Flat Screen
- Easy-to-use remote control
- Easy-to-use on-screen menu system
- Automatic timer to turn the TV on and off
- Adjustable picture and sound settings that can be stored in the TV's memory
- Automatic channel tuning for up to 181 channels
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- A built-in multi-channel sound decoder for stereo and bilingual listening
- Built-in, dual channel speakers
- A special sleep timer
- · Headphone jack for private listening
- 16:9 letter box format available depending upon source
- Picture in Picture

# Familiarizing Yourself with The TV

#### **Front Panel Buttons**

The buttons on the front panel control your TV's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.



#### TV/VIDEO

Press to change between viewing TV programs and signals from other components.

#### **9** MENU

Press to see an on-screen menu of your TV's features.

3 VOL - , +
Press to increase or decrease the volume. Also used to select items on the onmscreen menu.

**4** CH ▼ and CH ▲ Press to change channels. Also press to highlight various items on the on-screen menu.

#### **6** STANDBY indicator

Lights up when you turn the power off.

#### **Remote Control Sensor**

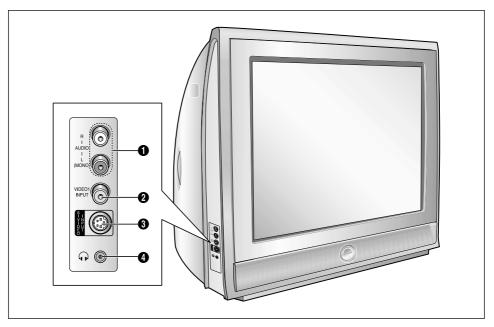
Aim the remote control towards this spot on the

#### **6** POWER

Press to turn the TV on and off.

#### **Side Panel Jacks**

You can use the side panel jacks to connect an A/V component that is used only occasionally, such as a camcorder or video game. (For information on connecting equipment, see pages 2.1 - 2.8.)



# **1 AUDIO INPUT jacks**Used to connect the audio

corder or video game.

signals from a camcorder or video game.

VIDEO INPUT jack
Used to connect a video signal from a cam-

#### **3** SUPER VIDEO INPUT jack

S-Video signal from an S-VHS VCR or DVD player.

Note: In S-Video mode, Audio Output depends what kind of audio input source is connected to the side audio input jacks (AV1).

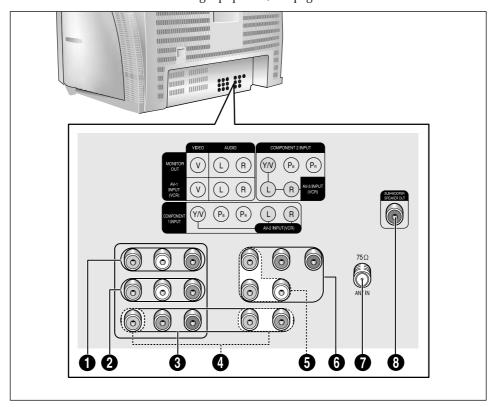
#### **4** HEADPHONE jack

Connect a set of external headphones to this jack for private listening.

#### **Rear Panel Jacks**

Use the rear panel jacks to connect an A/V component that will be connected continuously, such as a VCR or a DVD player. Because there are two sets of input jacks, you can connect two different A/V components (i.e., a VCR and a DVD, 2 VCRs, etc.)

For more information on connecting equipment, see pages 2.1 - 2.8.



#### AUDIO-VIDEO MONITOR OUTPUT jacks

Connect to the audio/video input jacks of a recording VCR.

Note: The Monitor Out does not operate in Component 1 or 2 modes.

#### **2**,**3**,**5** VIDEO INPUT jack

Video and Audio signals from VCRs, DVD players and similar devices.

Note: The common jack of component 1 and AV2, component 2 and AV3 input jacks are exclusive relation with each other.

# **6** COMPONENT 1 INPUT jacks (480i/480p/1080i)

Connect to the audio and component output jacks of a DVD player or Set-Top Box.

Note: Only black and white signals are output from a monitor in DVD/DTV mode.

# 6 COMPONENT 2 INPUT jacks (480i/480p/1080i)

Connect to the audio and component output jacks of a DVD player or Set-Top Box.

Note: Only black and white signals are output from a monitor in DVD/DTV mode.

#### **7** ANT IN

Connect to an antenna or to a cable TV system.

#### SUB-WOOFER SPEAKER OUT

#### (CL29Z7H/CL32Z7H/CL34Z7H)

Connect to the Sub-woofer speaker jack (built in Sub-woofer cable).

#### **Remote Control**

You can use the remote control up to about 23 feet from the TV. When using the remote, always point it directly at the TV.

You can also use your remote control to operate your VCR and cable box. See page 4.1 for details.

#### O Power

Turns the TV on and off.

#### 2 Number buttons

Press to select channels directly on the TV.

#### +100

Press to select channels over 100. For example, to select channel 121, press "+100," then press "2" and "1."

#### TV/Component

Press to switch the TV, COMPO-NENT1 or 2mode.

# ↑ CH▲ and CH▼ (Channel Up/Down)

Press CH▲ or CH▼ to change channels (Also used to highlight selections on the on-screen menus).

#### VOL -, VOL +

Press to increase or decrease the volume (Also used to make selections on the on-screen menus).

#### 6 Mute

Press to temporarily cut off the sound.

#### **6** EQ.

Press to select Equalizer menu directly.

#### P.size

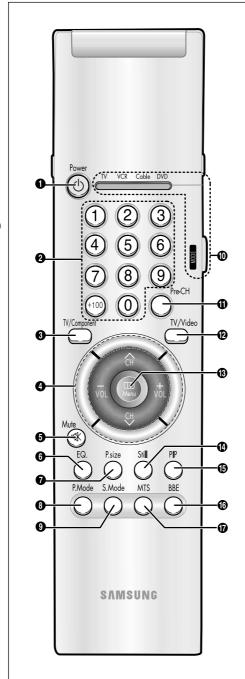
Press to change the screen size. Your choices are Normal, Zoom1, Zoom2 or Wide screen.

#### P.Mode

Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings).

#### 9 S.Mode

Adjust the TV sound by selecting one of the preset factory settings (or select your personal, customized sound settings).



#### **0** MODE

Selects a target device to be controlled by the Samsung remote control (i.e., TV, VCR, Cable box, or DVD).

#### 1 Pre-CH

Tunes to the previous channel.

#### TV/Video

Press to display all of the available video sources (i.e., AV1, AV2, AV3, S-VIDEO).

#### Menu

Displays the main on-screen menu.

#### Still(Main)

Press to stop the action during a particular scene. Press again to resume normal video.

Note: The still function doesn't operate in Component 1, 2 mode.

#### (B) PIP

Press this button to control the PIP window.

#### (BBE

A Sound related function that operates the treble, bass, and boost the function based to 650dB standards and reverses the phase to produce replicated sound that is close to the original sound.

# MTS (Multichannel Television Stereo)

Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

#### Your New TV

#### **Remote Control**

#### Reset

If your remote control is not functioning properly, take out the batteries and press the reset button for about 2~3 seconds. Re-insert the batteries and try using the remote control again.

Display Press to see the time, channel, etc., on-screen. Also press to exit (quit) the menu system.

#### Sleep

Press to select a preset time interval for automatic shutoff.

#### **VCR Controls**

#### Stop

Press this button to stop a tape during play, record, rewind or fast forward. If the button is pressed during Full-Automatic play, the function will be cancelled.

#### **REW (Rewind)**

Press to rewind a tape in your VCR.

#### Play/Pause

Press the Play/Pausebutton to play back prerecorded tapes or pause the tape.

Press to fast forward the tape in your VCR.



#### ② DNIe

Activates DNIe (Digital Natural Image engine).

#### Set

Use this button when you are setting up your remote control to operate your VCR, Cable box, or DVD).

#### ② R.surf

Press the R.SURF button to automatically return to a preferred channel after a user-preset time delay.

#### Add/Erase

Press to add or erase channels in the TV's memory.

#### PIP Controls

#### Source

Press to select one of the available signal sources for the PIP window (i.e., AV1, AV2, AV3).

Press to stop the action during a particular scene. Press again to resume normal video.

Note: The still function doesn't operate in Component 1, 2 mode.

#### **Locate**

Press to move the PIP window to any of the four corners of the TV screen.

#### Swap

Exchanges the video signal that is currently displayed on the main screen with the signal in the PIP window.

Press to make the PIP window small, large, double screen or stock ticker window.

#### <u>CH</u>

Displays the available channels in sequence (These buttons change channels in the PIP window only).

# **Chapter Two**

Installation

# **Connecting VHF and UHF Antennas**

If your antenna has a set of leads that look like this, see "Antennas with 300-ohm Flat Twin Leads," below.



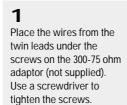
If your antenna has one lead that looks like this, see "Antennas with 75-ohm Round Leads," on page 2.2.

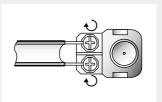


If you have two antennas, see "Separate VHF and UHF Antennas," on page 2.2.

#### Antennas with 300-ohm Flat Twin Leads

If you are using an off-air antenna (such as a roof antenna or "rabbit ears") that has 300-ohm twin flat leads, follow the directions below.

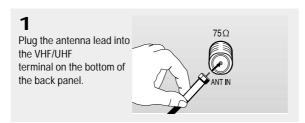




2 Plug the adaptor into the VHF/UHF terminal on the bottom of the back panel.

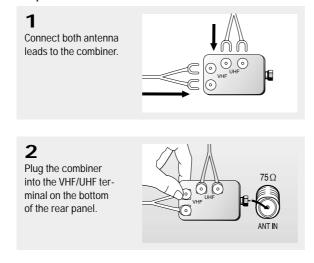


#### **Antennas with 75-ohm Round Leads**



#### **Separate VHF and UHF Antennas**

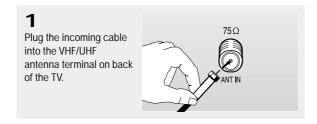
If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting the antennas to the TV. This procedure requires an optional combiner-adaptor (available at most electronics shops).



# **Connecting Cable TV**

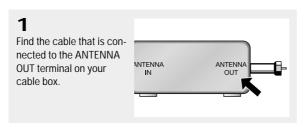
To connect to a cable TV system, follow the instructions below.

#### Cable without a Cable Box



■ Because this TV is cable-ready, you do not need a cable box to view unscrambled cable channels.

#### Connecting to a Cable Box that Descrambles All Channels

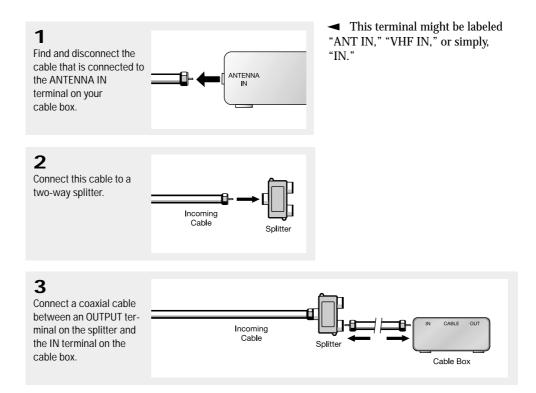


◆ This terminal might be labeled 
"ANT OUT," "VHF OUT," or simply, 
"OUT."



#### Connecting to a Cable Box that Descrambles Some Channels

If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch, and four lengths of coaxial cable. (These items are available at most electronics stores.)



terminal on the RF (A/B)

switch and the VHF/UHF

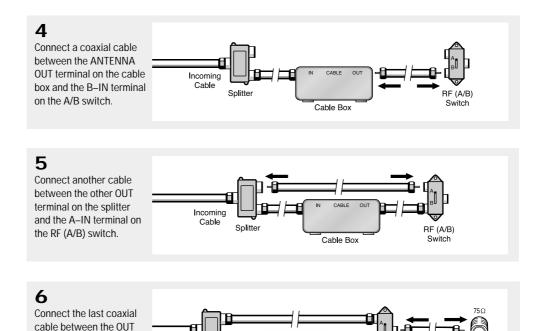
TV.

terminal on the rear of the

Incoming

Cable

Splitter



After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B," you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

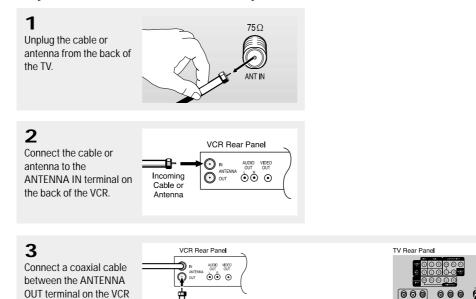
Cable Box

RF (A/B) Switch

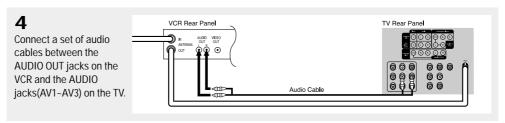
and the antenna terminal on the TV.

## Connecting a VCR

These instructions assume that you have already connected your TV to an antenna or a cable TV system (according to the instructions on pages 2.1-2.3). Skip step **1** if you have not yet connected to an antenna or a cable system.

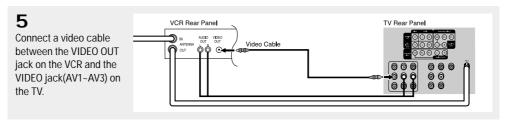


A coaxial cable is usually included with a VCR. (If not, check your local electronics store).



Coaxial Cable

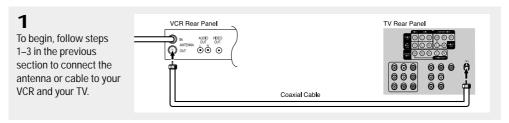
If you have a "mono" (non-stereo) VCR, use the Y-connector (not supplied) to hook up to the left and right audio input jacks of the TV. If your VCR is stereo, you must connect two cables.

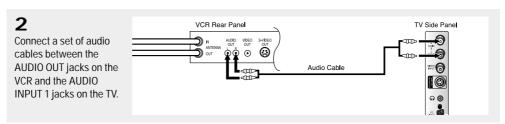


Follow the instructions in "Viewing a VCR or Camcorder Tape" to view your VCR tape.

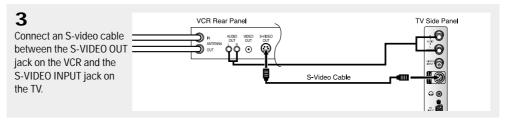
#### Connecting an S-VHS VCR

Your TV can be connected to an S-Video signal from an S-VHS VCR. (This connection delivers a better picture as compared to a standard VHS VCR.)





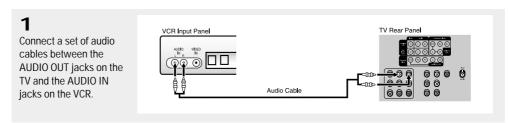
Make sure the jacks you are using are underneath the number "1."



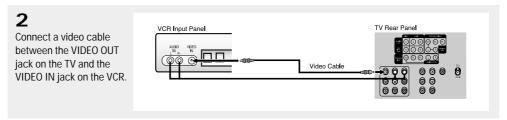
An S-video cable is usually included with an S-VHS VCR. (If not, check your local electronics store.)

#### Connecting a Second VCR to Record from the TV

Your TV can send out signals of its picture and sound to be recorded by a second VCR. To do this, connect your second VCR as follows:



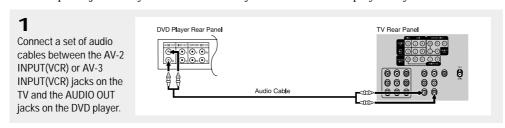
(The VCR input jacks might be either on the front or on back of the VCR.)

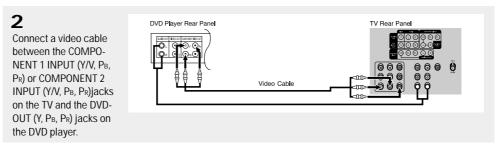


Refer to your VCR's instructions for more information about how to record using this kind of connection.

## Connecting a DVD Player (480i/480p)

The rear panel jacks on your TV make it easy to connect a DVD player to your TV.

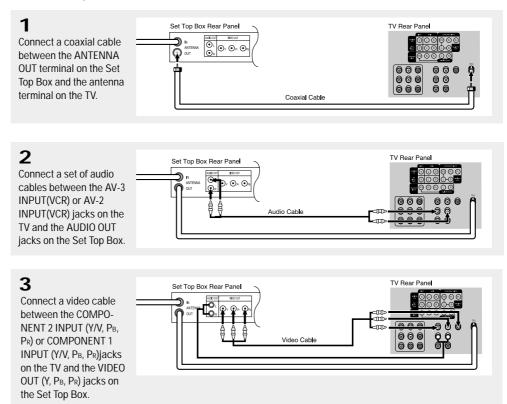




Note: For an explanation of Component video, see your DVD player's owner's manual.

# Connecting a Digital TV Set-Top Box (480p/1080i)

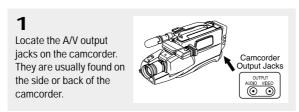
Connect the Y,  $P_B$ , and  $P_R$  video outputs of the set-top box to their corresponding inputs on the TV. Next, connect the Left and Right audio from the set-top box to the corresponding L and R terminals on the TV. (The connections for a typical set-top box are shown below.)

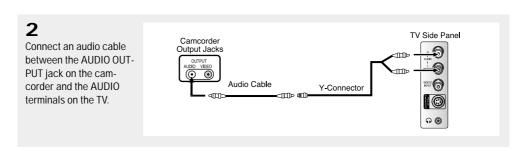


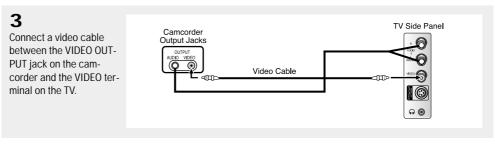
Note: For an explanation of Set top box, see your Set top box owner's manual.

## Connecting a Camcorder

The side panel jacks on your TV make it easy to connect a camcorder to your TV. They allow you to view the camcorder tapes without using a VCR. (Also see "Viewing an External Signal Source" on page 3.15)







The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.) If your camcorder is stereo, you need to connect a set of two cables.

# **Installing Batteries in the Remote Control**





■ Make sure to match the "+" and "−" ends of the batteries with the diagram inside the compartment.



→ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

The remote control can be used up to about 23 feet from the TV.

(Assuming typical TV usage, the batteries last for about one year.)

# **Chapter Three**

**OPERATION** 

# Turning the TV On and Off

Press the **POWER** button on the remote control. You can also use the **POWER** button on the front panel.

# Plug & Play Feature

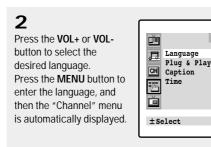
When the TV is initially powered On, five basic customer settings proceed automatically and subsequently: Setting the language, Video signal source, Ant. input check, Auto program, and Clock.

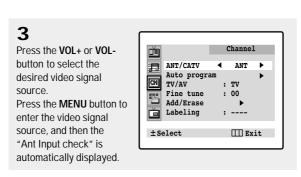
Function

◀ English ▶

Ⅲ Exit

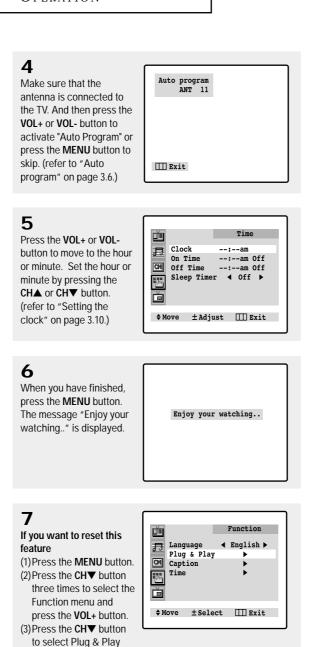






continued...

#### **OPERATION**



Note: Plug & Play feature doesn't work when in the A/V mode.

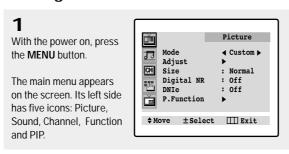
and press the VOL+ but-

The message "Plug & Play" is displayed.

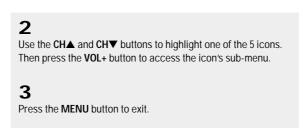
ton.

## Viewing the Menus and On-Screen Displays

#### Viewing the Menus



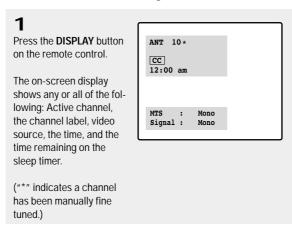
■ The on-screen menus disappear from the screen after thirty seconds.



■ You can also use the MENU, CHANNEL, and VOLUME buttons on the control panel of the TV to make selections.

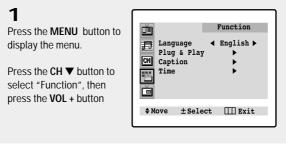
#### Viewing the Display

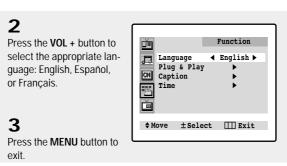
The display identifies the current channel and the status of certain audio-video settings.



■ The on-screen displays disappear after ten seconds.

# Selecting a Menu Language



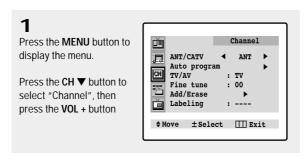


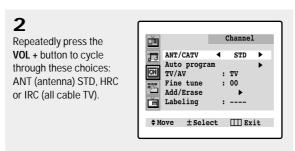
## Memorizing the Channels

Your TV can memorize and store all of the available channels for both "off-air" (antenna) and cable channels. After the available channels are memorized, use the CH ▲ and CH ▼ buttons to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding and deleting channels (manual).

#### Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or a cable system).

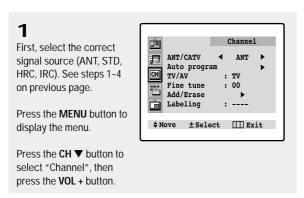


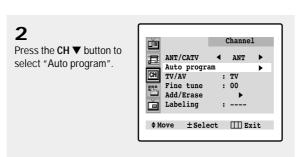


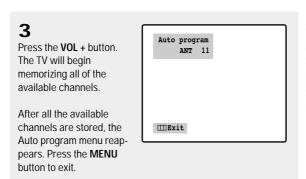
Note: STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.

At this point the signal source has been selected. Proceed to "Storing Channels in Memory" (next page).

#### **Storing Channels in Memory (Automatic Method)**

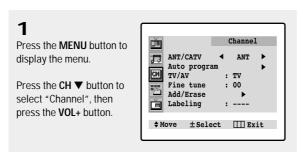


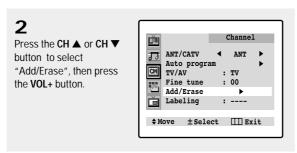


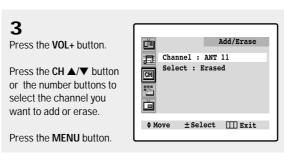


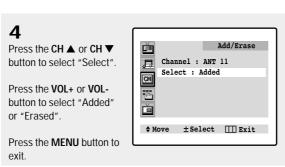
▼ The TV automatically cycles through all of the available channels and stores them in memory. This takes about one to two minutes. Press MENU at any time to interrupt the memorization process and return to the Channel menu.

#### **Adding and Erasing Channels (Manual Method)**









### **Changing Channels**

#### **Using the Channel Buttons**

#### 1

Press the CH ▲ or CH ▼ button to change channels.

When you press  $CH \triangle$  or  $CH \nabla$ , the TV changes channels in sequence. You will see all the channels that the TV has memorized. (The TV must have memorized at least three channels.) You will not see channels that were either erased or not memorized.

#### **Directly Accessing Channels**

Use the number buttons to quickly tune to any channel.

#### 1

Press the number buttons to go directly to a channel. For example, to select channel 27, press "2" then "7". The TV will change channels when you press the second number.

When you use the number buttons, you can directly select channels that were either erased or not memorized.

To select a channel over 100, press the +100 button. (For channel 122, press "+100" then "2" then "2".)

To change to single-digit channels (0–9) faster, press "0" before the single digit. (For channel "4" press "0" then "4".)

#### Using the PRE-CH Button to select the Previous Channel

#### 1

Press the **PRE-CH** button.
The TV will switch to the last channel viewed.

■ To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select the second channel. Then, use the PRE-CH button to quickly alternate between them.

# Adjusting the Volume

Press VOL + or - VOL to increase or decrease the volume.

#### **Using Mute**

At any time, you can temporarily cut off the sound using the Mute button.

#### 1

Press  $\boldsymbol{\text{MUTE}}$  and the sound cuts off.

The word "Mute" will appear in the lower-left corner of the screen.

#### 2

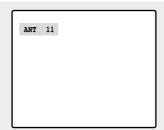
To turn mute off, press  $\mathbf{MUTE}$  again, or simply press either the  $\mathbf{VOL}-\$  or  $\mathbf{VOL}+\$  button.

## Labeling the Channels

Use this feature to assign an easy-to-remember label to any channel (i.e., "CBS", "ESPN", "PBS2", CNN1", etc.) A label consists of four fields, where each field is a letter, a number, "\*", or a blank. When the DISPLAY button is pressed, the channel label will appear next to the channel number.



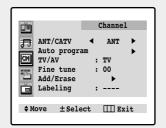
Press the  $\mathbf{CH} \triangle$  or  $\mathbf{CH} \nabla$  button to tune to the channel that will be labeled.



#### 2

Press the **MENU** button to display the menu, then press the **CH** ▼ button to select "Channel".

Press the **VOL** + button.



■ Note: You cannot select "Labeling" in the A/V mode.

#### 3

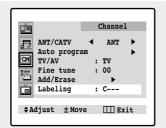
Press the **CH**  $\nabla$  button to select "Labeling".

Press the **VOL** + button to begin labeling. The left-most field will be highlighted. (Each label has four fields. See top paragraph.)



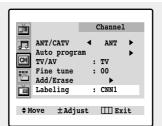
#### 4

Press the CH ▲ or CH ▼ button to select a letter, a number, "\*", or a blank. (Pressing the CH ▲ button results in this sequence: A,B,...Z,\*, blank,0,1,...9).



#### 5

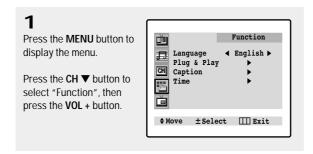
Press the VOL+ button to switch to the next field, which will be highlighted. Select a second letter or digit using the CH ▲ and CH ▼ buttons, as above. Repeat the process to select the last two digits.



Press the **MENU** button to set the label and clear the menus from the screen.

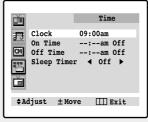
## **Setting the Clock**

Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV (Just press the DISPLAY button).





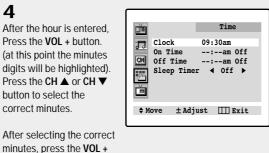
Press the VOL + button again (the hours digits will be highlighted). Press the CH ▲ or CH ▼ button repeatedly until the correct hour appears.



■ When selecting the hours, be sure to select the proper time of day (AM or PM).

You can change the hours by pressing the  $\mathbf{CH} \triangle$  or  $\mathbf{CH} \nabla$  button repeatedly (or by holding down either of these buttons).



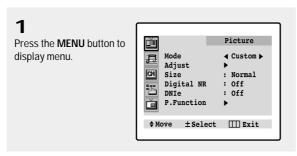


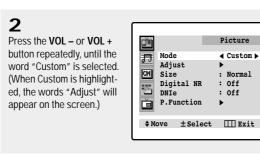
button.

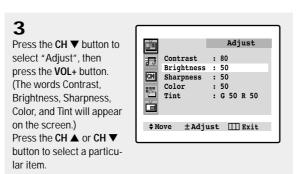
Press the MENU button to

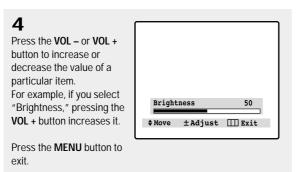
## **Customizing the Picture**

You can use the on-screen menus to change the Contrast, Brightness, Sharpness, Color, Tint and according to personal preference. (Alternatively, you can use one of the "automatic" settings. See next page.)





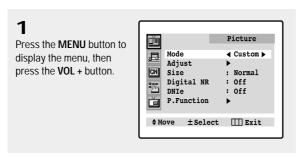


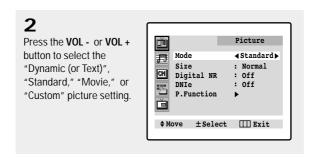


■ After adjusting an item, the gauge will automatically disappear (after about 5 seconds).

# **Using Automatic Picture Settings**

Your TV has three automatic picture settings ("Dynamic"(or Text), "Standard" and "Movie") that are preset at the factory. You can activate either Standard, Mild or Dynamic (or Text) by pressing the P.MODE button (or by making a selection from the menu). Or, you can select "Custom" which automatically recalls your personalized picture settings.

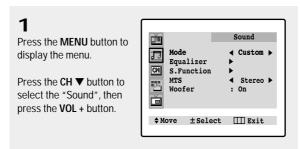


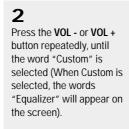


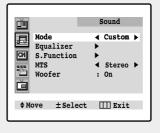
- Choose *Dynamic* for viewing the TV during the day or when there is brightlight in the room (only ANT and video mode).
- Choose Standard for the standard factory settings.
- Choose *Movie* when watching the movie.
- Choose *Custom* if you want to adjust the settings accordings to personal preference (see "Customizing the Picture", page 3.11).

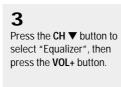
## **Customizing the Sound**

The sound settings can be adjusted to suit your personal perferences. (Alternatively, you can use one of the "automatic" settings. See next page.)

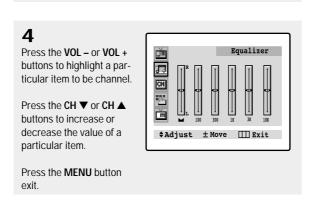






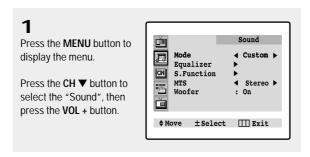


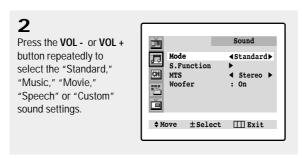




## **Using Automatic Sound Settings**

Your TV has four automatic sound settings ("Standard," "Music," "Movie," and "Speech") that are preset at the factory. You can activate either Standard, Music, Movie or Speech by pressing the S.MODE button (or by making a selection from the menu). Or, you can select "Custom," which automatically recalls your personalized sound settings.

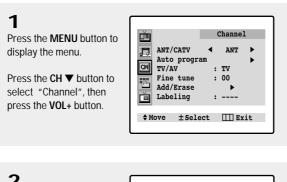


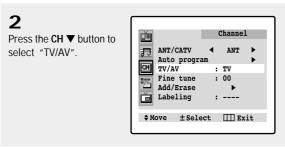


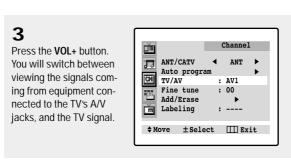
- Choose Standard for the standard factory settings.
- Choose *Music* when watching music videos or concerts.
- Choose Movies when watching movies.
- Choose *Speech* when watching a show that is mostly dialogue (i.e., news).
- Choose *Custom* to recall your personalized settings.

# Viewing an External Signal Source

You must select the appropriate mode in order to view the external signal on the TV.







# **Chapter Four**

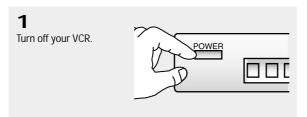
SPECIAL FEATURES

# **Customizing Your Remote Control**

Your TV comes equipped with a "universal" remote control. In addition to controlling the TV, the universal remote can also operate a VCR, DVD and a cable box (even if your VCR and cable box are made by manufacturers other than Samsung).

Note: The remote control might not be compatible with all DVD players, VCRs, and Cable boxes.

### **Setting Up Your Remote Control to Operate Your VCR (or DVD)**



2

Press the **MODE** button and make sure that the **VCR (or DVD)** LED is illuminated.

▼ The remote control has four "modes": "TV," "VCR", "Cable" and "DVD." Press the "MODE" button to switch the remote control to the "VCR" (or DVD) mode.

3

On your Samsung remote control, press the **SET** button.

4

Enter 3 digits of the VCR (or DVD) code listed on the next page for your brand of VCR (or DVD).

■ Make sure you enter 3 digits of the code, even if the first digit is a "0." If more than one code listed, try the first

5

Press the **POWER** button on the remote control. Your VCR (or DVD) should turn on. If your VCR (or DVD) turns on, your remote control is now set correctly.

■ If your VCR (or DVD) does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for the brand of your particular VCR (or DVD).

If no other codes are listed, try each code, 000 through 089.

6

Once your remote control is set up, press the **MODE** button any time you want to use the remote to operate your VCR (or DVD).

◀ When your remote control is in the "VCR" (or DVD) mode, the volume buttons still control your TV's volume.

When your remote is in the "TV" mode, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.

# SPECIAL FEATURES

### **VCR Codes**

Admiral 006, 079	KLH	073	RCA	000, 005, 007, 008, 028,
Aiwa 015	LG	009, 014, 046, 060		035, 037, 054, 069
Akai 017, 022, 023, 027, 030	Lloyd	015	Samsung	007, 013, 022, 032, 042, 077
Audio Dynamics 014, 016	Logik	031	Sansui	016
Bell & Howell 002	LXI	015	Sanyo	002, 012
Broksonic 010	Magnavox	008, 029, 053, 056	Scott	013, 041, 049, 068
Candle 007, 009, 013, 045, 046, 052	Marantz	002, 008, 014, 016,	Sears	002, 005, 009, 012, 018,
Cannon 008, 053		029, 030, 046, 061		019, 035, 043, 048
Citizen 007, 009, 013, 045, 046, 052	Marta	009	Sharp	006, 027, 039, 045
Colortyme 014	MEI	008	Shintom	017, 026, 031, 055
Craig 007, 012	Memorex	008, 009, 012, 015	Signature	015
Curtis-Mathes 000, 007, 008, 014,	MGA	027	Sony	017, 026, 038
015, 046, 053, 064, 067	Midland	032	Sylvania	008, 015, 029, 053, 056
Daewoo 013, 045, 076	Minota	005, 035	Symphoni	c 015
DBX 014, 016	Mitsubishi	005, 027, 035, 040	Tandy	002, 015
Dimensia 000	Montgomery wa	rd 006	Tashiko	009
Dynatech 015	MTC	007, 015	Tatung	030
Electrohome 027	Multitech	007, 015, 031, 032	Teac	015, 030, 069
Emerson 008, 009, 010, 013, 015, 020, 023, 027,	NEC 002, 014, 0	016, 030, 046, 061, 064	Technics	008
034, 041, 042, 047, 049, 057, 062, 065, 067, 068, 070	Optimus	006	Ternika	008, 009, 015, 021
Fisher 002, 012, 018, 019, 043, 048, 058	Panasonic	008, 053, 075, 077	TMK	067
Funai 015	Pentax	005, 035	Toshiba	005, 013, 019, 048, 049
GE 000, 007, 008, 032, 053	Pentex Reserch+	046	Totevision	007, 009
Go Video 007	Philco	008, 029, 053, 056	Unitech	007
Harman Kardon 014	Philips	008, 029	Vector Res	search 014, 016
Hitachi 005, 015, 035, 036	Pioneer	005, 016, 033, 050	Victor	016
Instant Replay 008	Portland	044, 045, 052	Video Cor	ncepts 014, 016
JC Penney 002, 005, 007, 008, 014,	ProScan	000	Videosoni	c 007
016, 030, 035, 051, 053	Quartz	002	Wards	005, 006, 007, 008, 009,
JCL 008, 002, 014, 016, 030, 046	Quasar	008, 053		012, 013, 015, 027, 031, 035
JVC 002, 014, 088, 089	Radio Shack/Rea	listic 002, 006, 008,	Yamaha	002, 014, 016, 030, 046
Kenwood 002, 014, 016, 030, 046	009, 012, 01	5, 019, 027, 045, 053	Zenith	011, 017, 026, 079

### **DVD** Codes

Philips	001
Proscan	002
RCA	002
Toshiba	003
Panasonic	004
Sony	008
Samsung	000

### **Setting Up Your Remote Control to Operate Your Cable Box**

# Turn off your cable box.

2

Press the **MODE** button and make sure that the **CABLE** LED is illuminated

■ The remote control has four "modes": "TV", "VCR", "Cable" and "DVD".

Press the "MODE" button to switch the remote control to the "Cable" mode.

3

On your Samsung remote control, press the SET button.

4

Enter 3 digits of the cable box code listed below for your brand of cable box.

■ Make sure you enter 3 digits of the code, even if the first digit is a "0." (If more than one code listed, try the first one)

5

Press the **POWER** button. Your cable box should turn on. If your cable box turns on, your remote control is now "set up" correctly.

■ If your cable box does not turn on, repeat steps 2, 3, and 4, but try one of the other codes listed for your particular brand of cable box (If no other codes are listed, try each cable box code, 000 through 077).

6

Once your remote control is set up, press the **MODE** button any time you want to use the remote to operate your cable box.

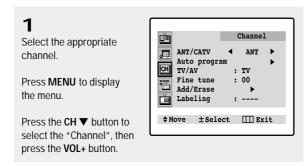
■ When your remote control is in the "CABLE" mode, the volume buttons still control your TV's volume. Also, the VCR control buttons (PLAY, PAUSE, etc.) will still operate your VCR.

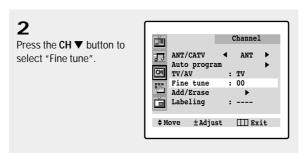
### Cable Box Codes

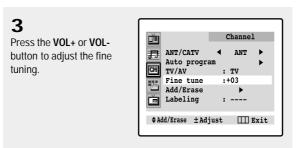
Anvision 007, 008	NSC 009	Signature 046
Cablestar 007, 008	Oak 016, 038	Sprucer 027
Eagle 007, 008	Osk Sigma 016	Starcom 046
Eastern Int. 002	Panasonic 003, 027, 039, 061,	Stargate 2000 058
General Instrument 046	073, 074	Sylvania 011, 059
GI 004, 005, 015, 023, 024,	Philips 007, 008, 019, 021, 026,	Texscan 011, 059
025, 030, 036, 067, 068, 069	028, 029, 032, 033, 040, 041	Tocom 017, 021, 049, 050, 055, 073
Hamlin 003, 012, 013, 034, 048	Pioneer 018, 020, 044, 074, 077	Unika 031, 032, 041
Hitachi 037, 043, 046	Randtek 007, 008	Universal 051, 052
Jerroid 004, 005, 015, 023, 024,	RCA 000, 027, 066	Viewster 007, 008, 019, 021, 026,
025, 030, 036, 046, 062, 065	Regal 003, 012, 013	028, 029, 032, 033, 040, 041
Macom 037, 043	Regency 002, 033	Warner Amex 044
Magnavox 007, 008, 019, 021,	SA 070, 071, 072	Zenith 014, 042, 057, 061,
026, 028, 029, 032, 033, 040, 041	Samsung 044, 003, 022, 063, 064	075, 076

# **Fine Tuning Channels**

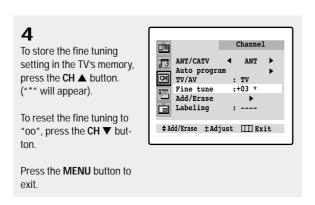
Use fine tuning to manually adjust a particular channel for optional reception.





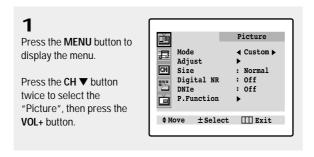


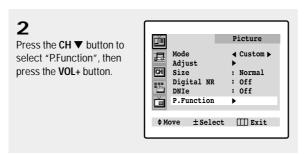
■ After you adjust the fine tuning, "\*" will appear when you press DIS-PLAY while watching this channel.

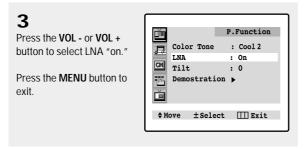


# **LNA (Low Noise Amplifier)**

If the TV is operating in a weak-signal area, sometimes the LNA function can improve the reception (a low-noise preamplifier boosts the incoming signal).



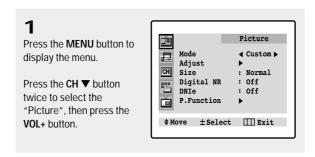


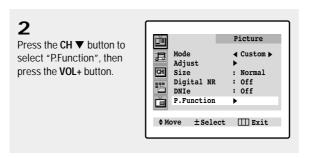


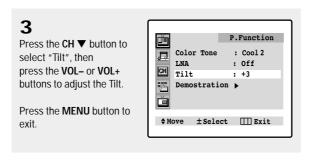
■ Pressing VOL - or VOL + will alternate between "On" and "Off."

### Tilt

Due to the Earth's magnetic field there may be same minor image tilt depending on the TV's location. When this occurs, follow the steps below.

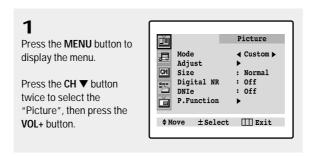


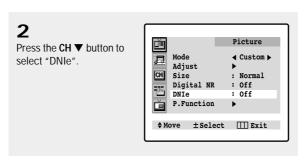


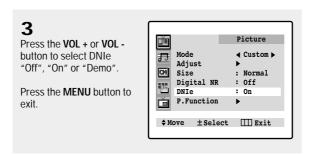


# DNIe™ (Digital Natural Image engine) DNIE™

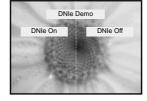
Samsung's New Technology enables an improved image with detail, contrast and white enhancement and 3D noise reduction.





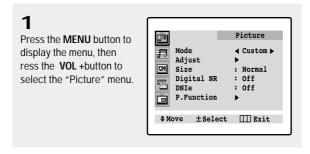


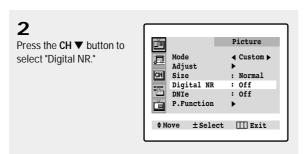
- On: Switches on the DNIe mode.
- Demo: The screen before applying DNIe appears on the right and the screen after applying DNIe appears on the left.
- Off: Switches off the DNIe mode.

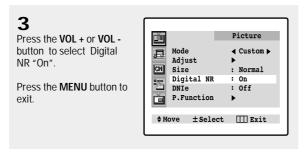


# **Digital Noise Reduction**

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.



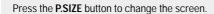


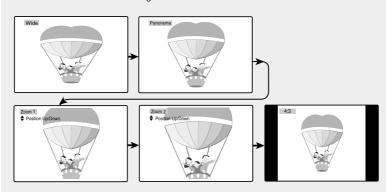


ton will alternate between "On" and "Off".

# **Changing the Screen Size**

### CL32Z7H/CL32Z6H





• Wide: Sets the picture to 16:9 wide mode.

• Panorama: Use this mode for the wide aspect ratio of a panoramic picture.

Magnifies the size of the picture on screen. • Zoom1:

You can also move the picture on screen using the joystick up or down.

• Zoom2: Magnifies the size of the picture more than Zoom1.

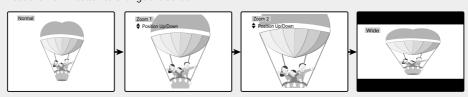
You can also move the picture on screen using the joystick up or down.

• 4:3(Normal): Sets the picture to 4:3 normal mode.

Notes: Screen size cannot be changed in the PIP mode. When the Aspect button is selected and then the appropriate OSD(On-Screen Display) is displayed, the Channel Up/Down buttons don't operate for about three seconds.

### CL29Z7H/CL34Z7H/CL29Z6H/CL34Z6H

Press the **P.SIZE** button to change the screen.



• Normal: Sets the picture to 4:3 normal mode.

• Zoom1: Magnifies the size of the picture on screen.

You can also move the picture on screen using the joystick up or down.

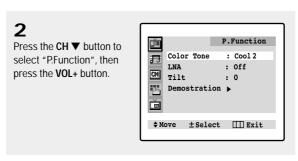
• Zoom2: Magnifies the size of the picture more than Zoom1.

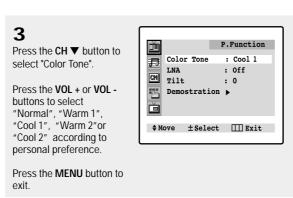
You can also move the picture on screen using the joystick up or down.

• Wide: Sets the picture to 16:9 wide mode.

# **Changing the Color Tone**

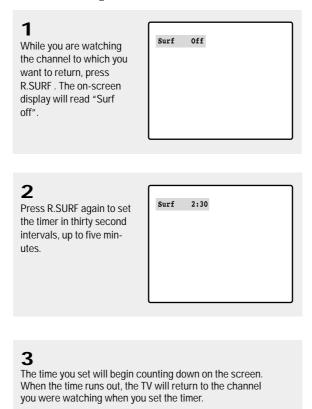
# Press the MENU button to display the menu, then press the VOL + button to select the "Picture" menu. | Mode | Adjust | Normal | Size | Normal | No

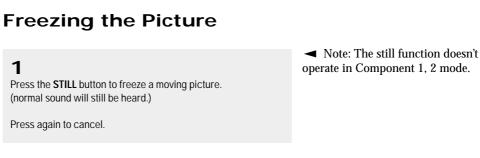




# Using the R.Surf Feature

This feature allows you to set the TV to return to a particular channel after a certain amount of time. For example, you may be watching a channel when commercials start. You can set the R.Surf to "5 minutes", then switch channels. After minutes, the TV will return to the original channel. To use the R.Surf feature:





# Setting the On/Off Timer

1

Press the **MENU** button to display the menu.

Press the CH ▼ button to select "Function", then press the VOL+ button.



■ Before using the timer, you must set the TV's clock. (See "Setting the Clock" on page 3.10).

When any of the timers are set, the "Timer" LED will illuminate (front panel of TV.)

2

Press the **CH** ▼ button to select "Time", then press the **VOL**+ button.

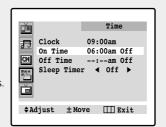


3

Press the **CH** ▼ button to select "On time".

Press the **VOL**+ button to select the "On time" hours. (The hours digits will be highlighted.)

Press the CH ▲ or CH ▼ button repeatedly to select the appropriate hours (i.e., the hour when the TV will turn on.)

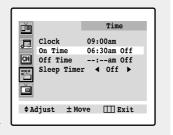


4

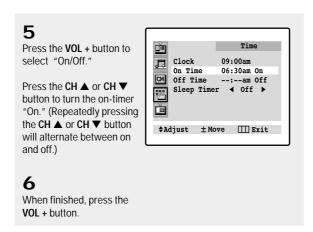
Press the **VOL+** button to select the "On time" minutes

(The minutes digits will be highlighted.)

Press the  $\mathbf{CH} \triangle$  or  $\mathbf{CH} \nabla$  button to select the appropriate minutes.



### SPECIAL FEATURES

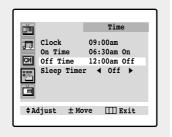


■ To deactivate the "On time," select "Off" during this step.



To set the Off time, press the  $\mathbf{CH} \ \mathbf{\nabla}$  button to select "Off time."

Press the **VOL** + button and set the hours and minutes. (Follow the same procedure as in steps 1~6 above.)



### ■ Absent Power Off

When you set the timer "On", your television will eventually be turned off, if you do not operate any controls during the 3 hours after the TV is turned on by timer. This function is available in only the timer "On" mode and will prevent a leakage accident or overheating, caused by your TV left on for a long time due to the timer "On" (when you are away on holiday, for example).

### 8

When finished setting the timer, press the MENU button to exit.

# **Setting the Sleep Timer**

The sleep timer automatically shuts off the TV after a preset time (from 10 to 180 minutes).

### 1

Press the **SLEEP** button on the remote control.

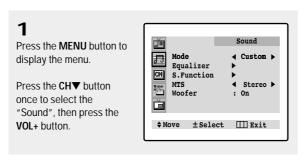
### 2

Press the **SLEEP** button repeatedly until the appropriate time interval appears (any of the preset values from "Off" to "180").

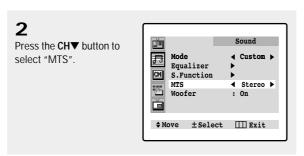
■ After about 5 seconds, the sleep display will disappear from the screen, and the time interval will be set.

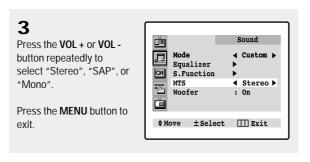
### **Choosing a Multi-Channel Sound (MTS)** Soundtrack

Depending on the particular program being broadcast, you can listen to Stereo, Mono, or a Separate Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)



■ Quick way to access the MTS: Just press the "MTS" button on the remote control.





The text at the bottom of the menu tells you if the incoming audio is stereo, SAP, or mono.

- Choose Stereo for channels that are broadcasting in stereo.
- Choose Mono for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose SAP to listen to the Separate Audio Program, which is usually a foreign-language translation.

# Extra sound settings (Surround, Auto Volume, Melody, BBE or Woofer)

The following sound settings can be adjusted to suit your personal preferences.

### Surround

Your Samsung TV can create a "surround" effect such that the sound seems to come from all directions. Once the "Surround" is set to "On", the setting applies to sound effects such as Standard, Music, Movie and Speech.

### Auto Volume

Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. "Auto volume" lets you automat-ically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

### Melody

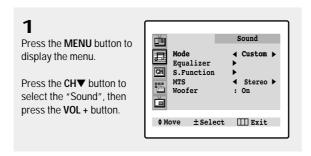
You can hear clear a melody sound when the TV is powered on or Off.

### BBF

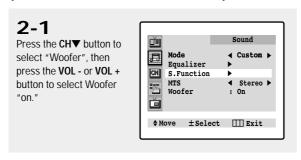
A Sound related function that operates the treble, bass, and boost the function based to 650dB standards and reverses the phase to produce replicated sound that is close to the original sound.

### • Woofer (CL29Z7H/CL32Z7H/CL34Z7H)

Woofer sound emphasizes the bass frequencies to add fullness to the sound.

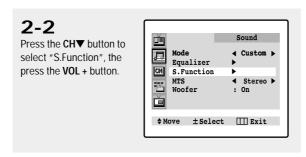


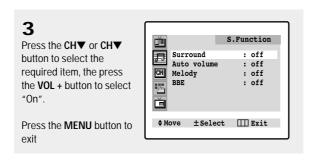
# Setting Woofer Sound (CL29Z7H/CL32Z7H/CL34Z7H)



continued...

# Settings Surround, Auto Volume, Melody or BBE

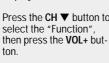


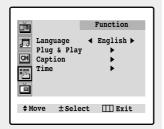


# **Viewing Closed Captions**

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: [CC].







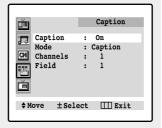
### 2

Press the **CH** ▼ button to select the "Caption", then press the **VOL**+ button.



# 3

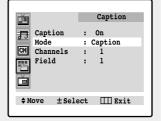
Press the **VOL** – or **VOL** + button to turn closed captioning on/off.



✓ Misspellings and unusual characters sometimes occur during closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. These are not malfunctions of the TV.

# 4

Press the CH ▼ button to select "Mode", then press VOL – or VOL + to select "Caption" or "Text."



■ In **caption mode**, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture.

In **text mode**, information unrelated to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.

5

Depending on the particular broadcast, it might be necessary to make changes to "Channels" and "Field":

Use the  $CH \triangle$ ,  $CH \lor$ , VOL + and VOL - buttons to make the changes. (Follow the same procedure as in steps 3-4 above.) Press the **MENU** button to exit.

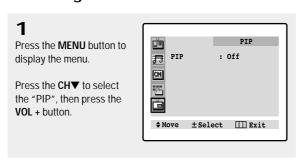
■ Different channels and fields display different information: Field 2 carries additional information that supplements the information in Field 1. (For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.)

# **Viewing Picture-in-Picture**

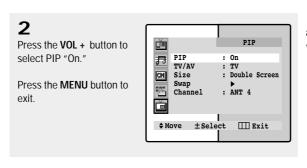
You can use the PIP feature to simultaneously to watch two video sources. Note: The PIP feature does not work with DVD signals and S-Video mode.

When PIP is selected in the Zoom mode, the Mode is automatically converted into the Normal mode.

### **Activating Picture-in-Picture**

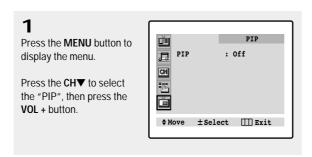


Quick way to access the PIP: Just press the PIP button on the remote control.

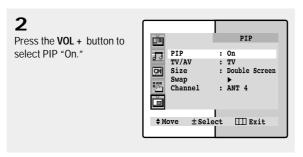


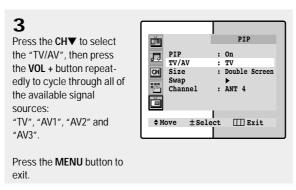
■ If you turn TV off while watching and turn it on again, the PIP window will disappear.

### Selecting a Signal Source (External A/V) for PIP



■ Quick way to access the PIP source: Just press the SOURCE button on the remote control.

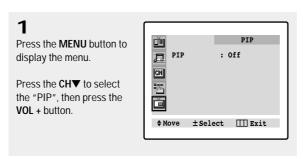




▼ For more information about external A/V components and signals, see "Viewing an External Signal Source" on page 3.15.
If you select "TV", the PIP image is

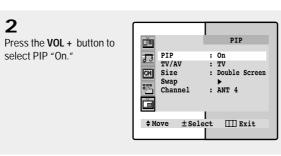
If you select "TV", the PIP image is the same as the main image.

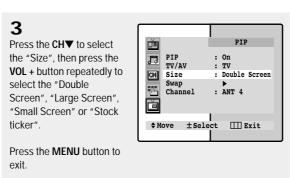
### Changing the Size of the PIP Window



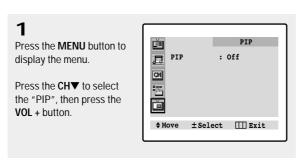
■ Quick way to access the PIP size: Just press the SIZE button on the remote control.

Press the SIZE button repeatedly to cycle through this sequence: double screen window, large window, small window and stock ticker window.

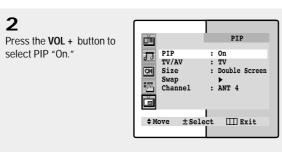


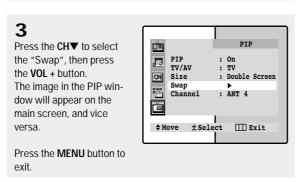


### Swapping the Contents of the PIP image and Main image

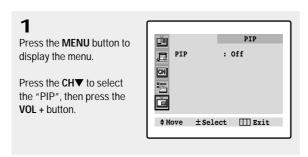


■ Quick way to access the SWAP: Just press the SWAP button on the remote control.

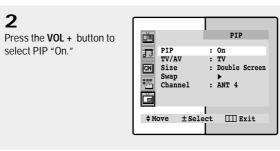


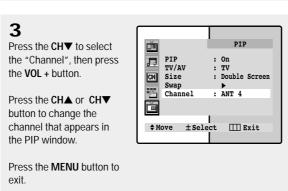


### **Changing the PIP Channel**



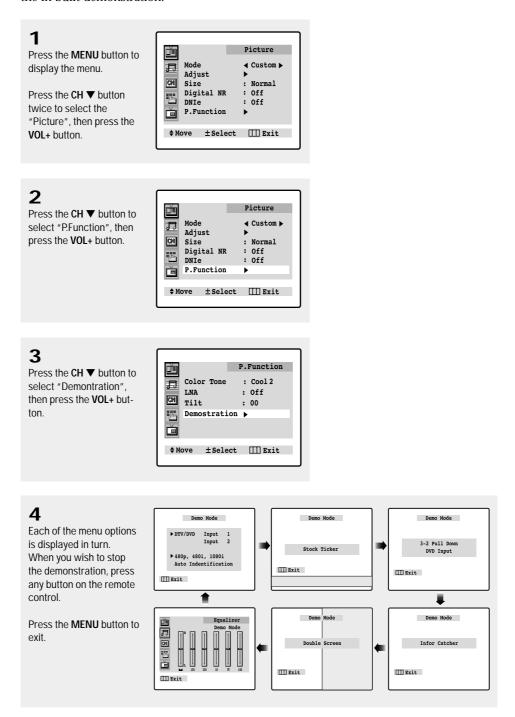
■ Quick way to access the PIP channel: Just press the CH or CH button(blue color) on the remote control.





# Viewing the Demonstration

To become familiar with the various menus provided by your television, you can view the in built demonstration.



# **Chapter Five**

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, then call your nearest service center.

# **Identifying Problems**

Problem	Possible Solution	
Poor picture	Try another channel. Adjust the antenna. Check all wire connections.	
Poor sound quality.	Try another channel. Adjust the antenna.	
No picture or sound.	Try another channel. Press the TV/VIDEO button. Make sure the TV is plugged in. Check the antenna connections.	
No color, wrong colors or tints.	Make sure the program is broadcast in color. Adjust the picture settings. If the set is moved or turned in a different direction, the power should be OFF for at least 30 minutes.	
Picture rolls vertically.	Adjust the antenna. Check all wire connections.	
The TV operates erratically	Unplug the TV for 30 seconds, then try operating it again.	
The TV won't turn on.	Make sure the wall outlet is working.	

### Cleaning and Maintaining Your TV

With proper care, your TV unit will give you many years of service. Please follow these guidelines to get the maximum performance from your TV.

### **Placement**

- Do not place the TV near extremely hot, cold, humid or dusty places.
- Do not place the TV near appliances with electric motors that create magnetic fields, such as vacuum cleaners.
- Keep the ventilation openings clear; do not place the TV on a soft surface, such as cloth or paper.
- Place the TV in a vertical position only.

### Liquids

• Do not handle liquids near or on the TV. Liquids that spill into it can cause serious damage.

### Cabinet

- Never open the cabinet or touch the parts inside.
- Wipe your TV with a clean, dry cloth. Never use water, cleaning fluids, wax, or chemicals.
- Do not put heavy objects on top of the cabinet.

### **Temperature**

• If your TV is suddenly moved from a cold to a warm place, unplug the power cord, and allow at least two hours for moisture that may have formed inside the unit to dry completely.

# **Using Your TV in Another Country**

If you plan to take your TV with you to a foreign country, please be aware of the different television systems that are in use around the world. A TV designed for one system may not work properly with another system due to differences in the TV channel frequencies

# **Specifications**

Model	CL29Z7H/CL29Z6H	CL32Z7H/CL32Z6H	CL34Z7H/CL34Z6H
Voltage	AC 100-240 V	AC 100-240 V	AC 100-240 V
Frequency of Operation	50/60Hz	50/60Hz	50/60Hz
Power Consumption	100 W	100 W	100 W
Dimensions	704 x 542 x 619 / 27.72 x 21.34 x 24.37	830 x 557 x 619 / 32.68 x21.93 x 24.37	836 x 582 x 719 / 32.91 x 22.91 x 28.31
(mm/inches)	762 x 519 x 600 / 30.00 x 20.43 x 23.62	898 x 559 x 587 / 35.35 x 22.01 x 23.11	911 x 579 x 703 / 35.87 x 22.80 x 27.68
Weight	46.5 / 102.52	57.8 / 127.43	68.8 / 151.68
(Kg/ lbs)	47.5 / 104.72	56.0 / 123.46	67.0 / 147.71

Memo

# $M{\scriptstyle EMO}$

### Memo